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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,440	09/06/2000	Katsuaki Tajima	48864-030	9740

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McDermott Will & Emery
600 13th Street NW
Washington, DC 20005-3096

EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	09/656,440		TAJIMA ET AL.	
	Examiner		Art Unit	
	Thierry L. Pham		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

DOUGLAS C. TRAN
PRIMARY EXAMINER

Tran

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 11/21/06..
- Claims 1, 5-6, 11-13 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-6, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (U.S. 5828780), and in view of Ito et al (U.S. 5884120).

Regarding claim 1, Suzuki discloses an image processing apparatus (image processing device 107, fig. 1) for processing image data of a job to be given to an output device (output device 102, fig. 1), the image processing apparatus comprising:

- a decision controller (image processing apparatus includes virtual device "VD" within an image processing device, figs. 5-7, col. 7, lines 3-8) for determining for each page of print job whether or not image data on said each page are data within a color reproduction range (determining whether or not the image data of each region is within the color reproduction range of output device 102, S808, fig. 8, col. 3, lines 13-16, col. 8, lines 52-62, col. 9, lines 33-37) of the output device and deciding parameters (parameters, col. 1, lines 5-10, col. 2, lines 38-42, and col. 3, lines 45-56) to be used for color correction (color correction of inputted image data using parameters, col. 1, lines 5-10, col. 2, lines 38-42, and col. 3, lines 45-56) on a job basis; and
- a color compressing controller (image processing apparatus includes compression controller, col. 16, lines 3-7) for compressing image data (linear color compression for compressing image data that is not within the color reproduction range to an allowable value (range) of an output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) using the decided parameters (fig. 21) so as to supply the processed data to the output device (col. 8, lines 39-61 and col. 13, lines 15-27).

However, Suzuki fails to teach an image processing apparatus having a memory for memorizing all of the plural pages of the job and wherein image data as taught by Suzuki comprising plurality of pages.

Ito, in the same field of endeavor for image processing, teaches an image processing apparatus (image data processing/controller, fig. 3a & 3b) having a memory (image memory 17, fig. 4, col. 4, lines 35-52) for memorizing all of the plural pages (image memory 17 for storing image data of documents, wherein each document comprising plural of pages, col. 4, lines 63-67 and col. 6, lines 35-40) of the job and that it is well known in the art that an image data comprising plurality of pages (an image data comprising plurality of pages, col. 7, lines 30-35). In other words, Suzuki explicitly teaches an apparatus and method for processing image data (i.e. document as shown in fig. 10) *in general*, but fails to explicitly state that image data (i.e. document) comprising plurality of pages. It is well known in the art that image data (i.e. also refers to as document) contains plurality of 1-N pages (e.g. document of four pages, ten pages, and etc) as taught by Ito (col. 6, lines 35-40). Image memory 17 as taught by Ito also stores plurality of documents, wherein each document comprising plurality of pages. Number of pages and/or documents can be stored in image memory 17 depends on its storage capacity (e.g. 100MB and etc.).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify image processing apparatus of Suzuki to process image data with plurality of pages as per teachings of Ito because of the following reason: (●) to prevent the entire color image from losing the color attractiveness due to effect by data of a few pixel data outside the color reproduction range (Suzuki, col. 2, lines 44-52); (●) to allow an image processing device of Suzuki to process print job with multiple pages. In addition, it would have been obvious to determine whether all pages of an image data (e.g. print job) is within a reproduction range or not, and to perform color compression accordingly to all pages of image data (e.g. print job) to ensure all print data are outputted within a color reproduction range of an output device.

Therefore, it would have been obvious to combine Suzuki with Ito to obtain the invention as specified in claim 1.

Regarding claim 5, Ito further teaches the image processing device apparatus according to claim 1, wherein the output device is a printer for printing an image in accordance with the image data (copy machine as shown in fig. 1 includes a print engine for output image data onto a recording medium) and wherein the image processing apparatus is built in the printer (image data processing unit is incorporated within a copy machine as shown in fig. 3, col. 1, lines 38-58).

Regarding claim 6, Ito further teaches the image processing apparatus according to claim 1, wherein the image data are generated by an image reader (copy machine as shown in fig. 1 includes a reader for reading original images to be copied), and the image processing apparatus is built in the image reader (CPU 102 is incorporated within an copy machine, fig. 3a).

Regarding claim 11, Suzuki further teaches the image processing apparatus according to claim 1, wherein the decision controller performs the deciding for each section of the standard color space for the parameters (col. 8, lines 39-61 and col. 13, lines 15-27) to be used for color correction, and the compressing controller performs a color compression (linear color compression for compressing image data that is not within the color reproduction range to an allowable value (range) of an output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) uniformly for each section of standard color space.

Regarding claim 12: Claim 12 is a method corresponding to the apparatus and it recites limitations that are similar and in the same scope of invention as to claim 1; therefore, claim 12 is rejected for the same rejection rationale/basis as described in claim 1 above.

Regarding claim 13, Suzuki further teaches the image processing method according to claim 12, wherein the deciding step (col. 8, lines 39-61 and col. 13, lines 15-27) is performed for each section of standard color space, and the compressing step

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(linear color compression for compressing image data that is not within the color reproduction range to an allowable value (range) of an output device 102, S812, fig. 8, figs. 13 and 21, col. 3, lines 20-37 and col. 6, lines 60-67) performs the color compression uniformly for each section of standard color space.

Response to Arguments

Applicant's arguments filed 11/21/06 have been fully considered but they are not persuasive.

- Regarding claim 1, the applicants argued the cited prior art of record (US 5828780 to Suzuki et al and US 5884120 to Ito et al) fail to teach and/or suggest (i) determining the data is within the color reproduction range of the output device; and (ii) selecting the parameters that would provide uniform color production of all of the pages of the print job; (iii) a memory for storing plurality of pages of a document; (iv) no motivation to combine the cited references.

In response, the Examiner disagrees. Suzuki clearly teaches (i) determining the data is within the color reproduction range of the output device (determining whether or not the image data of each region is within the color reproduction range of output device 102, S808, fig. 8, col. 3, lines 13-16, col. 8, lines 52-62, col. 9, lines 33-37); and (ii) selecting the parameters (color correction of inputted image data using parameters, col. 1, lines 5-10, col. 2, lines 38-42, and col. 3, lines 45-56) that would provide uniform color production of all of the pages of the print job; (iii) fig. 1 of Suzuki shows an example of memory device 104 and fig. 3a of Ito shows plurality of storage areas (e.g. RAM 121, RAM 123, RAM 122, RAM 124, RAM 125 and memory unit 102). It is well known that these storage areas can store plurality of image data or files depending on its storage capacity. Document with plurality of pages are well known in the art (e.g. 4 pages) and widely used in the art. The Examiner herein relies upon Ito to demonstrate/show a well-known example of a document (e.g. image data) containing plurality of pages. Suzuki's disclosure refers document data as an "image data", and fails to provide whether an "image data" contains plurality of pages. Ito teaches an example of an "image data" contains plurality of pages. In other words, "image data" or "document data" as taught by

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Suzuki is not limit to just one page, but can also contain plurality of pages (as taught by Ito); (iv) the motivation for combining the references are: (●) to prevent the entire color image from losing the color attractiveness due to effect by data of a few pixel data outside the color reproduction range (Suzuki, col. 2, lines 44-52); (●) to allow an image processing device of Suzuki to process print job with multiple pages. In addition, it would have been obvious to determine whether all pages of an image data (e.g. print job) is within a reproduction range or not, and to perform color compression accordingly to all pages of image data (e.g. print job) to ensure all print data are outputted within a color reproduction range of an output device. NOTE: the examiner relies upon Ito is only to show "image data" is not limit to just one page, but also plurality of pages.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham



DOUGLAS Q. TRAN
PRIMARY EXAMINER

